



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

*Technologie und Terminologie der Gewerbe und Künste bei Griechen und Römern.* VON HUGO BLÜMNER. Erster Band. Zweite, gänzlich umgearbeitete Auflage. Leipzig und Berlin: B. G. Teubner, 1912. Pp. xii+364. M. 17.

After an interval of nearly forty years Professor Blümner is issuing a revised edition of his authoritative work on the arts and trades of the Greeks and Romans, the first volume of the first edition of which appeared in 1874. The new archaeological material which has come to light since the first compilation of his work has afforded much more information along certain lines than we possessed then, and the studies of experts in various fields, embodied in such works as the Pauly-Wissowa *Real-encyclopädie* and the Daremberg-Saglio *Dictionnaire*, to say nothing of almost countless scattered articles, have claimed the author's consideration. On the other hand, little that is new has been added to our knowledge of some few of the topics treated by Professor Blümner. The second edition, then, in some sections presents an entirely new and rewritten text, in others the words of the original edition are repeated with additions, and a few sections are kept practically unchanged.

Vol. I contains eight subheads: the preparation of bread; the manufacture of fabrics; sewing, embroidering, and felting; dyeing; the preparation of animal skins; the making of plaited wares; paper (papyrus) manufacture, and the production of oils and unguents. The greatest improvement over the first edition, aside from the fact that it has been brought up to date, lies in the additions to the illustrations, which number 135 against 53 in the old edition. Most of those formerly used are retained, but the new cuts are far superior in clearness and pertinence. Half-tones from photographs of terra cotta figures and groups, reliefs, vases, and ruins comprise the majority of these additions.

The more important supplements to, and revisions of, the text come in the sections on bread-making, spinning and weaving (the latter of which is practically new), paper manufacture, and the making of olive products. A new classification of varieties of wheat into *πυρὸς σιτηνίος* and *πυρὸς σεμινάλης*, summer and winter wheat, is adopted (pp. 52 ff.), and is carried out in distinguishing the varieties of meal and bread (pp. 74 ff., which are practically new) among both Greeks and Romans; and in the classification of peeled grains the fundamental distinction is pointed out between the true and false varieties, *χόνδρος* over against *χίδρα* and *κρίμμα*. Such enumerations and classifications of technical terms are an especially valuable feature of the new edition, as they were of the old, and their present greater exactness enhances their value.

In the chapter on spinning and weaving the most important changes come in the discussion of *κάταγμα*, looms, and the technique of weaving. In the first edition (p. 106) *κάταγμα* is mentioned as wool already spun, but no

account was given of it as the product of a special process, the preliminary rolling of the wool against the bare or clothed leg to prepare a rough yarn that could be more readily spun. In the new edition (pp. 112 ff.) the process is described and illustrated; the passage is based largely on the article of Hauser in the *Jahreshefte d. Österr. archäol. Instit.* XII (1909), 80 ff.

In the discussion of the loom and weaving, Professor Blümner now accepts and incorporates in his text (pp. 148 ff.) the theory that the making of the "natural" and the "artificial" sheds for the introduction of the shuttle was accomplished, respectively, by means of the *κάλαμος*, dividing the odd and even threads of the warp, and by the *κανών*, to which the alternate threads were fastened, and which the weaver, like the woman in *Iliad* xxiii. 760 ff., draws toward the breast to change the relative position of the two sets of warp threads and to form the "artificial shed." This was adopted, after discussion, in the first edition (p. 130, note 1). The illustrations and description of a loom from the Faroë Islands (pp. 155 f.) add much to the clearness of the exposition.

The discussion of purple manufacture and dyeing has been retouched; one of the most interesting additions is the mention of the photochemical changes that occur in the making of the dye-stuff (p. 242), which have been investigated by De Lacaze-Duthiers. On the preparation of papyrus, too, Professor Blümner, in view of recent investigations, has added to the material presented in his first edition. In some cases he has taken advantage of the opportunity to insert material available at the time of his first edition but not found therein—e.g., p. 315, n. 3, on the first occurrence of the word *χάρπη* and the illustrations of the monument of the baker Eurysaces (pp. 39 ff.).

There are a few typographical errors in the book, of which the most serious is the dropping of a line between pages 308 and 309. A self-contradictory statement is made in the description of Fig. 51 by printing "Spindel" instead of "Wocken" in p. 133, line 7.

As it now stands, Professor Blümner's treatise is the best repertorium of technical terms of Greek and Roman handicrafts, and of the *loci classici* bearing thereon, and its account of the manufacturing processes leaves little to be desired. With the addition in the present edition of adequate pictorial illustrations and extremely careful explanations of them, this exhaustive collection of information on ancient trades and arts may well continue to be the standard handbook of scholars for another forty years.

FRANK EGGLESTON ROBBINS

UNIVERSITY OF MICHIGAN

---

*Conditional Statement in Livy.* By R. B. STEELE. Leipzig: Brockhaus, 1910. Pp. 61.

This work belongs to the class of those which are valuable chiefly as a collection of data. It is essentially a catalogue of the conditional sentences